THE OHIO MEDICAL REPOSITORY.

Printed by Wm. H. Woodward, 137, Main-st., on the first and third Wednesdays of every month.

"SPECTEMUR AGENDO."

Communications, post paid, addressed to the Editor, or W. H. Woodward, will receive attention.

NO. XIII. CINCINNATI, SEPTEMBER 20, 1826. VOL. I.

[COMMUNICATED FOR THE OHIO MED. REPOSITORY.]

INQUIRIES into the sources and modus operandi of nature, in the production and expulsion of animal heat; by which, warm blooded animals are enabled to preserve, very nearly, the same degree of heat, in temperatures far above or below their own natural standard.

PHILOSOPHERS and wise men of all ages, have sought for the nature, or sources, of animal heat. Some have ascribed it to friction, or the attrition of the blood against the sides of the arteries; others to fermentation, &c. But the most universal opinion, at this time is, that the lungs are the principal organs for the generation of animal heat.*

For many reasons (some of which I shall presently assign,) I beg leave to differ from those opinions, or any other of which I have ever heard or read.—Though I may attempt to pull down the hypotheses of others in order to erect my own, I am well aware that all generally received opinions, have to support them all the arguments of preceding ages, and all the props and stays that the wisest men and ablest supporters of those theories can give them; while mine may meet with none, or very little support, save that of my own feeble efforts. I, therefore, with diffidence, enter into the investigation of a subject of so much obscurity, and in which so much controversy is involved, as the one I am now about to consider. With all due respect for the opinions of others, I shall, on this occasion, venture to advance my own, and leave it with my enlightened readers, for their adoption or rejection.

In the first place I shall consider the changes which the blood undergoes in its routine, or circulation through the system, with those which it suffers in various situations out of the body. It is well known that the blood is of a florid colour in the pulmonary veins, and aortic or general arterial system; and that it is of a darker appearance in the general venal and pulmonic arterial system. When blood is abstracted from the body and exposed to the action of heat, or carbonic acid gas, it becomes carbonized and darker; but if exposed fully to the action of oxygen gas, it becomes more florid; according very much with the changes that take place in its circulation. This circumstance renders it quite improbable, that animal heat is generated in the lungs, for the supposed increased carbonization and heat, would at least balance with the increased oxygenation of the blood, so that it would pass through the lungs unchanged in colour: hence it is necessary to search for the sources of animal heat elsewhere.

From many natural phenomena, from analogy, and from some experiments which I have made, I am persuaded, that the *cutaneous vessels* are the principal agents in the production of animal heat.†

Without seeking for any particular point in the circulation at which to begin, for the purpose of tracing it through its course, I shall commence at the aortic system, where the blood is ready changed, having received its fresh supply of nutriment, and is prepared for the various offices which it is designed to perform. We will now consider it driven forward to every part of the body, the lungs not excepted. Much of the blood is conveyed to the skin, where many of the arteries terminate in the exhalents, by which the cutaneous perspiration is constantly kept up during a state of health. In this way much of the blood is exposed to the immediate influence of the atmosphere; and from the great affinity which certain constituent portions of the blood has for the carbone of the atmosphere, it is absorbed, and uniting with the oxygenated blood forms carbonic acid producing *heat*, which heat is taken into the system by the absorbents. The blood, having parted with its oxygen, becomes carbonized, loses its florid colour, &c. That part of the blood which serves for the nourishment of the body, parts with its oxygen and consigns it to the parts upon which it is distributed, and consequently becomes less florid.—The whole mass, (except what is detained, or conveyed by circuitous routes, for further secretions, as to the liver, &c. and which finally is conveyed to the pulmonary veins, in its passage through the lungs, and at which time it possesses less affinity for caloric, from the secretions it has made, for which reason it possesses a greater affinity for oxygen,) is again exposed to the atmosphere, and by its peculiar exposition, and the action of the lungs, it absorbs the oxygen from the inspired air, and the carbonic acid, with heat, is evolved and expired with the azote (which is unchanged) the air decomposed by parting with its oxygen being no longer fit for respiration.—The blood being in this way oxydized, and become florid, is immediately conveyed to the aortic system. But before the blood enters the circulation through the lungs it receives the chyle, lymph, &c. to be oxygenated with the blood. At this time, as I believe, it receives a fresh supply of vitality, for oxygen appears to be absolutely and indispensably necessary to life and animation.

When animals are exposed to a temperature above their own, the cutaneous vessels act with less energy, or a greater quantity of water, is exhaled which, absorbing the carbonic acid gas, renders it somewhat viscid, and prevents its being exhaled as rapidly as the insensible perspiration, producing what is called sweat, which is generally cold in proportion to its viscidity. If exposed freely to the atmosphere the sensible perspiration, by absorbing the carbonic acid gas, prevents its being taken into the system; or the cutaneous action is diminished, and less heat is actually generated, at the same time the respiration is increased, (as any person may observe in animals, especially in the dog which pants involuntarily, and while asleep, if exposed to the rays of the sun,) by which more heat is evolved and expired. These combined effects prevent animals from being overcharged with heat in a temperature above their own; and if exposed to a temperature below their own, the natural functions before described are performed with greater energy.

Perspiration appears to serve the purposes of nature in preventing too great an accumulation of heat; while respiration serves to evolve and convey off the superabundant and vitiated heat. For when the body is thrown into exercise, a greater quantity of carbonized blood is thrown upon the lungs. This produces an increased action of the respiratory muscles, in order that the lungs may be relieved of the excess of fluid thus introduced into them.

In this way an increased quantity of air is admitted into the lungs, consequently more oxygen is taken into the blood, and more heat (proportioned to the circulation) is evolved and expired. The increased impetus of the blood now excites an increased action of the cutaneous vessels, the exhalents pour forth a greater quantity of the matter of perspiration, and sweating is produced. This sweat, which is at first very thin, absorbs the carbon from the atmosphere, and, becoming more viscid, stands in drops on the surface of the body, thus preventing the too great an accumulation, or absorption, of heat; for it may be observed that the heat continues to increase during increase of exercise (if the circulation continues vigorous) until sweat breaks out; after which the temperature gradually sinks to its natural standard, or even below it if the exercise be carried to a debilitating extreme, in which case the skin becomes dry, the pulse quick and feeble, till the animal, quite exhausted, either sinks to rest, or nature makes a second effort in a profuse and refreshing sweat. But this second effort, if the increased exercise be still continued, serves only to exhaust the animal to a greater degree, and he finally sinks down, with every symptom of debility, into a state of quiescence.

It is evident that the carbon which is absorbed by the perspirable matter cannot come into contact with the constituent particles of the blood; heat therefore cannot be generated to as great a degree in proportion to the circulation. And if animal heat be generated in the lungs, why is so much heat evolved during perspiration! and, indeed, we should expect to find the blood of the pulmonary vessels warmer than that of any other part of the body; and the blood of the pulmonary veins than the blood of the pulmonary arteries. But the reverse of this is really the case; for the arterial blood of the pulmonary veins is, generally, two degrees lower than that of the pulmonary artery. And this accords with my plan of relieving the system of heat, &c.

When a ligature is put round an artery, the limb, or part, which received its blood from the obstructed artery becomes colder than it was, which coldness is the effect of the languor of the circulation, by which the action of the cutaneous vessels is diminished, until the expansion of the lateral branches above the ligature supplies the usual quantity of blood to the limb, or part.

In malconformation of the heart, and in those diseases which obstruct the circulation of the blood through the lungs, from an insufficiency in the oxygenation of the blood, the skin, in certain parts, assumes a purple hue, the circulation through the system is retarded and sluggish, the cutaneous vessels, from their torpor, absorb, or take up less carbon, for which reason less heat is generated and taken into the system; the patient complains of continued coldness, or, in other words, the system, receiving less oxygen by the lungs, and less carbon by the cutaneous vessels, the capacity of the system is insufficient to generate the requisite proportion of heat. In fevers of the typhoid type the carbon that is absorbed by the cutaneous vessels is not taken into the system in a regular and proper form, but is mostly retained in the skin, owing to a spasm of the extreme vessels. Hence it is that the patient complains of chilliness at the same time that the skin is preternaturally and permanently hot.

Again—if animal heat were generated in the lungs, they would be possessed of more heat than any other part of the body. But we find the temperature of the lungs somewhat below that of most, or perhaps all the other parts of the body.

The coldness of the nose of some quadrupeds endowed, in a high degree, with the sense of smell, is owing to the vessels having the same peculiar action of the lungs, or pulmonary vessels: and being exposed, in an unlimited degree, to the atmosphere, a more permanent degree of coldness is produced.

Natural respiration is performed upon the principles of *suction*, by which means the air cells are only filled to a certain extent, which is just sufficient for the purposes of nature. Artificial respiration acts upon the principles of *distention;* and, although only the same degree of external distention be caused, yet there is a greater quantity of air applied, or used, than in the natural. The difference in quantity ac-

---

* This opinion, we believe, has been abandoned by many of our best physiologists; though we are sensible that it still has its supporters. [ED.

† Our author appears not to have been informed, that this doctrine has been taught in Transylvania for the last three or four years: and we believe it orthodox. [ED.

cords exactly with that which would be found in a measure of a definite size filled with air and then compressed with the same force that is used in supporting artificial respiration. The difference in volume will show the difference in the quantities of air used in the two modes, or kinds, of respiration.—The air cells being more fully distended also allows a greater evolvement of carbonic acid gas, and a greater absorption of oxygen gas, by which means a greater quantity of heat is evolved and expired, and more cold admitted, than consists with the economy of nature.

To reason from analogy in the various phenomena of nature, we shall find many very striking negative proofs, or evidences, in favour of the theory I have advanced for the production of animal heat.

It is well known that cold blooded animals have not the peculiar arrangement and action of the cutaneous vessels which warm blooded animals have. They have not the pores of the skin; neither do they support an insensible perspiration. Their skin either exudes a mucous, gelatinous, or milk coloured matter; as in the snail, eel, toad, &c. or they are covered with shells, scales, &c. as the snake, tortoise, fish, &c.

I will mention some of the principal negative evidences above alluded to, which are as follows. Many of the cold blooded animals breathe as do the warm blooded, and yet no heat is generated in the lungs; but the blood is oxygenated there as in the warm blooded animal: there is no evolvement and expiration of heat, and a lesser quantity, or portion of oxygen is required to support the vital principle; or rather, there is less waste of oxygen; for as no heat is generated no oxygen is decomposed in that way. There is, also, less carbonic acid gas taken or absorbed into the system, which may be the reason why cold blooded animals are so much more tenacious of life than warm blooded. And 2dly from the simple formation of the heart, and from the peculiarity of the circulation, it is quite rational to conclude that less oxygen is required for, and less actually serves the purposes of nature in cold blooded animals, for all the blood is not circulated through the lungs at once, as in the warm blooded; consequently it cannot all be oxydized at once. The cold blooded animals have generally the most simple heart, commonly the single heart, or its functions are those of a single heart, in general, whatever may be its apparent formation. Cold blooded animals have not the peculiarities of cutaneous action that characterize the warm blooded, and through the medium of which carbonic acid gas is absorbed into the system, heat generated, &c. yet all are equally provided with an apparatus, or organ, for the oxygenation of the blood; for oxygen seems to be the principal agent, next to proper organization, in the support and continuance of the vital principle. I do not mean that oxygenation is the only characteristic of animal life, but that it is a necessary constituent, and without it, life cannot be any more than warmth without caloric. We therefore find that sweating is the peculiar characteristic of warm blooded animals.

Upon these principles many interesting arguments and pleasing researches may be founded. Many of the phenomena of fever, of local affections, of inflammations, of local and general debility, colliquative sweating, night sweats, hectic fever, &c. with most of the spontaneous or natural diseases* may be understood and explained, and the indications of cure may also be rendered more plain and familiar.

*By the term spontaneous, or *natural*, I mean such diseases as arise from sources which are not understood, as the contagious, epidemic, casual, &c.

To the Editor of the Medical Intelligencer.

Sir—As every thing like improvement in either of the departments of Medicine, deserves publicity; I am induced to send you, for the Intelligencer, a short notice of what I consider as an improved method of teaching Myology.

The skeletons designed for the study of the muscles being cleared of their oil, are painted over with a white ground, made with white lead and a very minute proportion of Prussian blue, mixed with boiled oil and Copal varnish. Two coats, at least, of white, are necessary for a good ground. Upon this ground, the precise surfaces corresponding with the different muscular attachments, are painted in strong colours, the *origin* and *insertion* of any muscle being marked with the same colour.

Besides the bones thus painted, preparations are made of the muscles dissected from each other, dried and painted in colours corresponding with the coloured patches on the skeletons.

The colours employed, are:

Deep red,	Light green,
Light red,	Deep blue or Indigo,
Dull red,	Light blue or Azure,
Deep orange,	Purple,
Light do.	Dark brown,
Yellow,	Light do.
Deep green,	Ash.

It may seem that this list of colours is too small to prevent confusion, from the frequent repetition of them in their application to the muscles. On trial, however, it has been found to be nearly or quite as large as is compatible with distinctness, especially when the painted bones or muscles are viewed at the distance of several feet, as is often necessary in a lecture room; and even the necessary reiteration of a few strong and distinct colours is attended with less inconvenience than a large variety, the hues of which must approximate each other, the difficulty of distinguishing them increasing, as their number is multiplied.

With a skeleton thus painted, while going over with his osteology, the student obtains a permanent knowledge of a very large number of muscular attachments: and when the dissected and painted muscles come to be studied, an almost indelible acquaintance with their connections, their position in relation to each other, and to the blood vessels and nerves, if these textures are preserved as they ought to be, is soon acquired.

For the last three years I have taught myology to the summer classes, exclusively upon this apparatus; and in the lectures in autumn and winter, have made constant use of it joined with recent dissections.—With these facilities, I am confident that the labour of acquiring a knowledge of the muscles is greatly diminished. Several of our students, who, previous to their coming here, had paid considerable attention to anatomy; have expressed their full conviction, that the labour is reduced more than one half from that which is ordinarily necessary. It is true that dissections ,indefatigably pursued, will give a more accurate knowledge of all the soft textures, than dried preparations; but when it is recollected, that a large proportion of students who attend lectures cannot or do not avail themselves of the benefit of private dissections, when it is borne in mind that *dried* preparations of the blood-vessels have long been found of unspeakable advantage to the student, and that a good knowledge of the muscles is essential to an acquaintance with those very important textures, the blood-vessels and nerves,—it will not be denied that this method promises much, in one of the most important and laborious departments of anatomical study.

I will here remark that the same method adopted with the nerves, will be found exceedingly useful. The dried and painted nerves, like the coloured muscles, catch the eye and make an impression: and soon the colour of a particular nerve becomes associated with the parts to which it is distributed. On these preparations, I find, that even the complicated nerves of the head and trunk, admit of comparatively easy and distinct demonstration, and I consider them as altogether preferable to wet preparations, for students who do not enjoy great facilities for private dissections.

Yours, &c.

R. D. MUSSEY.

TIC DOULOUREUX.

Three cases of Tic Douloureux, in one of which about eight ounces of carbonate of iron were taken in thirty-six hours, are communicated by P. C. Blackett, Esq. As the profession is deeply interested in the recital of cases of this formidable disease successfully treated, we shall present an abstract of them.

Case 1. Mrs. C. ætat. forty-three. Occasional pain in the right side of the face for two years past; in the vicinity of the parotid gland: three or four paroxysms a day; believed to arise from irritation of the uterus, consequent to *change of life*. After a purge, carbonate of iron was administered for nine or ten days; pain somewhat alleviated; a blister behind the ear of the affected side: no further amendment; twenty drops of tincture of Belladona, three times a day; other remedies omitted; this in the course of five days relieved her entirely; to prevent a relapse, the dose was given twice a day for a fortnight; no return of the disease.

Case 2. Capt. S. ætat. twenty-six, complained of great irritation in the urethra and bladder, constant micturition, discharge of urine, sometimes copious, at others obstructed, with these symptoms of irritability of the bladder, &c. there was paroxysms of pain over the left eye, pressure upon the sight of which created an increase of it. It was, in every sense of the word, Tic Douloureux. A full sized bougie was passed, which produced pain in the nerve of the forehead. He was then ordered to take oil, when his bowels were constipated, and the following pills:—R. Cupri Sulphatis, gr. iij.; Extracti conii 3i, M. fiat massa in pilulas xviii. quarum capiat unam 9ta quaque hora. In one week the irritation of the bladder was relieved, and in six weeks the cure was completed.

Case 3. Communicated in a letter to Mr. B., from a gentleman at Welford, stating his own case. One year previous, he had been exposed on horseback to a damp atmosphere, the wind at north east; this gave rise to a cold sensation on the zygomatic arch, increasing until he experienced severe pain at times. He tried the carbonate of iron in drachm doses every six hours in honey, with decot. cincon. infus. cascarilla, and sulp. acid. some relief afforded; at a subsequent attack, tried G. assafœt. et Ferri Sulphat. ää 3ss. fiat mass et div. in pill. xii. Nine of these were taken that evening; more relief than before.

At a subsequent severe attack, he took the carbonate of iron upon a large scale, so that, by his own computation, there were taken eight ounces of that medicine in thirty-six hours, accompanying each dose with a draught containing one drachm and a half of ext. sarsæ, &c. every six hours. The disease was arrested, and the gentleman has considerable hopes of not having a return. The effect on the bowels was only to open them plentifully, without griping. A sinapism was at intervals applied to the seat of pain. At a subsequent communication, it appears he was permanently cured.—*Med. Recor.*

Mr. A. B. Granville, M. D., F. R. S. details at considerable length a severe case of protracted headach, terminating in Tic Douloureux, and arising from [illegible]ed digestion, amongst the precursors of that formidable disease. Mr. G. conceives that intense and obstinate headach following or preceding but invariably accompanying certain indispositions called *bilious*, is the one most deserving of notice.—In the instance before us, the first symptoms were headach, and the disease appeared to alternate from the head to the digestive organs: several times during the course of the disease, purgatives afforded partial relief; cups and leeches were applied to the head with evident benefit, but when Tic Douloureux made its appearance decidedly; carbonate of iron taken in scruple doses increased to one drachm three times a day, and rhubarb pills, together with enemas to keep the bowels open, rapidly effected a cure.—*Vid. Med. Recor.*

CINCINNATI;
WEDNESDAY, SEPTEMBER 20, 1826.

TO OUR PATRONS.

The present number completes the first half year of the "Ohio Medical Repository." Our engagements call for twenty-four numbers, but we contemplate giving twenty-six; one to consist of an index and title page. We feel truly grateful for the extensive and respectable patronage, secured to us by the physicians of the West: it has far exceeded our expectations; and we are happy in having it in our power to state, that the support already furnished, is amply sufficient to secure a long life to the "Repository."

How far we have succeeded in realizing the expectations or demands, of the profession, we leave with them to determine. We are consious of wishing to be useful, and no means within our power of rendering the work interesting and useful, has or will be neglected.

The *Repository* has already a circulation, in ten states of the union, and we believe, with general approbation: objections have been generally made, to the size and form of the work; this we contemplate remedying, so soon as a sufficient number of subscribers are added, to warrant the extra expenses.

Our first design was to commence small, and increase the size of the work, as it was called for, and supported by the profession.

The physicians cannot be insensible of our dependence on them, for both funds and matter. The latter has been by them neglected; though we acknowledge our obligations to many, for their interesting and instructive communications, and earnestly solicit a continuance of such favors.

We will remind our Patrons that the subscription fee was made payable in advance. The expenses of publishing, are pressing upon us; we hope, therefore, that all who have not settled for the first year, will forward the amount immediately, on the receipt of this number. [Ed.

MEDICAL BOTANY.

A description of the Western Medical Plants, *including some notice of their Medical virtues; to be selected and described at, or near, the time of their flowering, and continued through the season of Botanical investigation;*

By J. Locke, M. D.
Author of the Outlines of Botany,
And Principal of the Cincinnati Female Academy.

Cicuta maculata. *American Hemlock. Water Hemlock. Cow-bane. Snake weed.*

It grows in wet places, and often to the height of six or seven feet. The stalk has a general resemblance to that of a full grown seed parsnip.

The root lives through the winter, and is probably most virulent during that season. It consists of a number of finger-like portions, proceeding from the base of the stalk, and extending a few inches into the ground, where they terminate in blunt ends resembling the end of the finger. When cut across, it exhibits numerous pores from which exudes a vicid yellowish juice of a strong penetrating taste: the smell is strong, and not unlike that of the parsnip. *Both the smell and taste of the root are rather agreeable, resembling the "Spikenard"* (Aralia racemosa) *the root of which is often ate.*

The stem dies every autumn, but like numerous other large weeds often remains standing during the winter. It is round, smooth and jointed; with spreading branches.

The leaf-stalk clasps the stem in a sheath, branches two or three times, and bears from nine to thirty leaflets with sharp teeth on the edge.

Its white flowers and round seeds grow in heads (umbels) at the ends of the branches. Each branch divides at a common centre into numerous rays; each of these rays divides in the same manner into numerous other little rays or stalks, each of which bears a flower or fruit. The larger or lower stalks have no leaves about the centre from which they spring, but the smaller or upper ones have a fringe of very minute leaflets, less than one fourth of an inch in length.

Class V. Pentandria.
Order II. Digynia.
Natural Order. Umbelliferæ.
Character of the Genus Cicuta. Involucre 3 to 5 leaved; fruit sub-ovate, grooved.
Species. C. maculata. Serratures of the leaves mucronate: petioles membranaceous, 2-lobed at the apex.

The symptoms exhibited by a patient who was poisoned by eating the *water hemlock*, as was noticed in a lad of this city, were convulsions, nausea and vomiting; eyes glassy and wandering—pupils dilated and insensible; pulse hardly perceptible; extremities cold; constant jactation; antagonizing muscles alternately convulsed, drawing the eyes and angles of the mouth right and left in quick succession; jaws locked; ejections frothy mucous, mixed with a dark floculent sediment and blood; muscles of deglutition spasmodically affected, on presenting any substance to the mouth. Such were the symptoms in the advanced stage, in the case of Mr. A.'s son, who recovered.*

Mæder, six years of age, accompanied by a child of eight years, and by six little girls, ate some roots of Water Hemlock, which he took for parsnips.—Soon after he experienced anxiety of the præcordia, uttered a few words, lay down, and made water with considerable force; shortly after which, he fell a prey to horrible convulsions; lost the use of his senses, and strongly closed his mouth: he gnashed his teeth, rolled his eyes about in a extraordinary manner, and rendered blood by the ears. He had a frequent hiccup; made efforts to vomit, without being able to open his mouth; he experienced severe pains in the joints; his head was frequently bent backward, and the whole back was arched so that a little child might with safety have crept through the space formed between his back and the bed. The convulsions having ceased, he implored the assistance of his mother. Whatever means were employed, it was impossible to raise him; his strength diminished, and he expired about half an hour after the invasion of the symptoms. The abdomen and the face swelled up after death; a small degree of lividness was observed near the eyes; there flowed from the mouth a very considerable quantity of green froth, which continued to appear, as fast as it was wiped away. Amongst the other children who had likewise eaten the roots of this plant, the six little girls experienced bad symptoms, and recovered; but the child of eight years of age, who took a tolerably large quantity, died.

It results from the preceding facts,

That the *Cicuta Virosa* or *Aquatica*, exerts upon men an action similar to that of the *Conium Maculatum*, but more energetic.—*Nancrede's Orfila.*

* These symptoms were observed and reported, by the editor of this paper, in February 1825; and re-published by the editor of the *Boston Med. Intel.*

The moral and physical Influence of the Morning and Evening air on man.

(*Concluded from page* 40.)

Atmospheric influence, upon the moral conduct of man, is a subject worthy of investigation. Certain states of atmosphere, are well known to produce gloominess, low spirits, and a peculiar disaffection to all the innocent amusements of life; and govern arbitrarily, the moral dispositions of men.

There is also a kind of weather that creates a happy temperament of mind, a buoyancy of spirits, and an elasticity and sprightliness of action, that gives a relish to life, and a wish to excel in all things, morally and intellectually perfect.

If we walk in the streets in one of our most pleasant moonlight evenings, we will find them thronged with company; gay, cheerful, and happy; full of life and good feeling. Even the prisoner in his cell, whilst peeping through his iron grates, will, for a moment, forget his ignominious unhappy lot, and contemplate, in ecstacies, the beauties of the night; few men, governed by the natural stimuli of their constitutions, would commit a crime, when under the pacific influence of such an evening.

A deteriorated atmosphere begets a disposition to crime. This fact has been brought forward by some, as one cause of more depravity in cities than in the country: in all crowded assemblies we discover, in each individual, a peculiar irritability of temper, and a disposition for contention; unless this depressing influence of the air is counteracted, by theatrical exhibitions, good music, cheerful company, or some kind of pleasing amusement. The damp, smoky atmosphere of November, in London, is said to be a principal cause of the many cases of suicide which are committed in that city: the mild, soft air of Italy, creates that gay, cheerful, happy temperament, of the Italian ladies.

The evening air appears to possess the quality of creating, in man, a relish for amusements, and a wish to engage, with his friends and companions, in convivial exercises. The lovers seek for the soft calm influence of the moonlight evening, to tell and hear each others love, and repeat their solemn vows: it has been the custom of all nations to select the evening, as the time best adapted for their meetings of amusement and pleasure.

The savage, the assassin, and the wild beasts of prey, (such as depend on their physical powers,) governed by a kind of animal instinct and the baser passions, select the morning; whose darkness hides, whilst its atmosphere sustains them, in the accomplishment of their murderous designs. The warrior prefers the morning for executing his deeds of valor; whilst the previous evening was spent, in perfecting his plans of battle.

The most aggravated stage of continued fevers have long been observed to occur in the evening: "evening exacerbations" is the common language of pathologists. Many opinions have been advanced by medical authors, relative to the cause of this phenon, but none have stood the test of succeeding theorists. Man is happy at night, from the exhilirating influence of the atmosphere: this, we do not pretend to say, is the only cause—for, at night, he reflects that the cares, fatigues, and perplexities of the day are past, and a night of rest is before him: if he has troubles, they are in prospective, and hope, that "anchor of the soul," parleys off the intruding foe.

This fact, we are sensible, would be used as an argument against us: but give a man a glass of spirituous liquor; then excite his passions, and the effects of the brandy would not be felt—but administer the stimulus, when he is at perfect rest, and you find him exhilirated immediately. So in relation to the fevered patient;—he reflects that another day is past, and he has been accustomed to enjoy that hour as a time of rest or recreation. Habit, that "second nature," exerts her influence in composing the mind and body of the patient; whilst that renovating quality of the evening air, cheers, for a time, the drooping spirits, and creates a wish in the patient, to participate in its accompanying pleasures, which desire is soon dampened by the reality of his situation; fear, hope, supplication, and despondency, alternately fill the breast; commotion is induced, the brain and nerves excited, the circulation quickened, the heat augmented, the febrile exacerbation introduced, and soon perfected.

If the patients' mind was even impaired, the effect would be nearly the same; for though he was incapable of intellectual exertion, still the susceptibilities of the system to this atmospheric influence would exist, rendered more sensitive by disease; and thus assisted by the overwhelming influence of habit, would be sufficient to produce, upon the acce-

mulated excitabilities of the system, an equal degree of excitement.

The morning air is well calculated for influencing and sustaining all manual performances; feats that depend on physical force, are best executed in the morning. The system is invigorated, not only from the tonic effects of the air, but from a night of rest. Nature designed the night as a time of rest; and would she not suit the morning, to the perfection of this plan of renovation? here we see again the force of habit, applicable to the remission of fever in the morning: the system has been accustomed to arouse itself, and assume new strength and vigor of life: this habit, now in case of fever, sustains the system, and supports it against the enemy, and for a time keeps him in subjection; but as the day advances, he renews the attack, and is successful, when assisted by the influence of the evening air.

THE FAMILY PHYSICIAN.

This *Western work*, from which we have made occasional extracts, is now completed, and ready for distribution.

We have not, as yet, had time to give it more than a cursory reading, and from this general view of the work we must express ourselves well pleased. It contains much important local matter, which will be interesting both to the professional and common public. The introduction contains many valuable remarks, on the medical topography of the Western country; also some useful and interesting rules for the government of recent emigrants. The physiological proem is concise and instructing; its pathology, in general, orthodox. A Western practical work, on medicine, has long been a *desideratum*: though this is designed as a popular treatise, still it will be found interesting and instructive to the physician; and will supply the place of one more purely scientific and professional; such an one, as has long been promised by Professor Drake, and anxiously looked for by the profession. Our acquaintance with the talents of the Author, and the high estimation in which we hold them, induces us to hope that, his pen will be further employed in the investigation of all Western medical subjects. The work is neatly executed by the proprietor; whose honourable ambition, for the promotion of the arts and sciences in the West, we hope, will be amply rewarded and suitably encouraged. [Ed.

Trusses.——We have examined a variety of trusses, made by *John M. Hewit*, of Lexington, Ky. and for sale by *Lot Edwards & Co.* of this city. We believe them equal to any we have seen, of Eastern importation. The great variety, and excellent workmanship of these trusses, are sufficient to recommend them; and being of Western manufacture should ensure their patronage. We would advise the physicians to call and examine them, and satisfy themselves. [Ed.

MEDICAL SCHOOL OF VERMONT.

This school is located in Burlington, Vermont.—The first medical lectures delivered in this institution, were given by Drs. Le Conte, Cazier, and John Pomeroy, in the spring of 1816. The professors at this time are Dr. Anderson; Dr. Waterhouse, Dr. Sweetsa and Dr. Benedict. The lectures for the present session commenced on the first Wednesday of this month, to continue fourteen weeks.

MEDICAL SCHOOL IN BOSTON.

The Lectures in this institution commences on the third Wednesday of November. The professors are Drs. Warren, Gorham, Channing, Bigelow, and Jackson.

Late accounts from New-Orleans and Natchez state, that both of these cities remain unusually healthy.

Cincinnati never was known to be more healthy, at this season of the year, than at this time.

Amputation at the shoulder joint.—Dr. J. Wagner, of this city, has lately performed this operation, in a manner highly creditable to himself and the profession. The patient, now the eighteenth day, is doing well. The man was bit by a snake, and some of his associates put a tight ligature high up on the arm, to stop the progress of the poison; in consequence of which, the circulation was completely checked, and general gangrene below the ligature ensued. The operation was performed twelve days after the accident. *S. Car. M. Jour.*

"*Sulphate of quinine.*—M. Henry the younger, has lately made known an expeditious and cheap process, for obtaining directly the sulphate of quinine. He digests, repeatedly, in hot water acidulated by sulphuric acid, (6 or 7 grammes [gr. 92.66, or gr. 123.55 troy] to each kilogramme [oz. 32.17 troy] of distilled water.) He blanches the liquor by means of hot lime, and washes the precipitate to separate the excess of lime. He repeatedly digests this precipitate, when well drained, in alcohol at 36 deg. (.837.) He then obtains, by distillation, a brown viscid matter, which becomes brittle when cold, and is very bitter. He digests it in hot water, acidulated by sulphuric acid; and the liquor, when cold, gives perfect chrystals of pure sulphate of quinine. He has not succeeded so well in extracting the sulphate of cinchonine from the grey bark by this mode of preparation.

"The sulphate of quinine, obtained in this way, is in the form of white crystals, which are entirely soluble in water; little so, however, in cold, but more so in boiling, and especially in weakly acidulated water."

Muriate of Gold in Syphilis.—This remedy is as ancient as the year 1540, according to Dr. Gustavus Benaben, who employes the preparation of Dr. Chretien (muriate of gold and soda) in the form of frictions to the tongue, beginning with the one-fourteenth part of a grain, gradually increased to an eighth; sometimes used internally in very small doses. The effects on the animal economy are copious sweats or a great flow of urine. The quantity required for the removal of secondary symptoms from six to twelve grains. *Revue Med. Oct.*

Two case of dropsy, one ascites, the other anasarca, in which unusually large doses of digitalis were administered successfully by John Davy, M.D. The medicine was increased first to forty-five, afterwards to seventy grains per day! *Med. Recor.*

A case of peculiar nervous excitement, related by J. Vale Ashbury, Esq. is deserving of considerable attention. In many of its features it resembled hydrophobia, and apparently arose from exposure to the sun in very hot weather, whilst the patient was employed for a fortnight in making hay: a cure was effected by means of purgatives and antispasmodics. *Ibid.*

A case of abdominal pregnancy, during which the subject became again pregnant, and was delivered of a large male infant at the usual time, is quoted from Hufeland's Journal. The Cesarian operation was performed, the dead fœtus removed, and the patient recovered. *Ibid.*

Dr. Emmons, of Kentucky, has used calomel in ophthalmia, both acute and chronic, with the greatest success. It was dropped, in minute quantities, into the eye, by raising the lid. Its effect was most rapid and decided. Obstinate cases were cured by it in a few days. *Ibid.*

Medical College of OHIO.

THE LECTURES in this Institution, will commence on the First Monday of November next: and will continue until the end of the ensuing February, on the following subjects: viz.

Anatomy, Physiology, and Surgery, by Jedediah Cobb, M. D.

Materia Medica and Obstetrics, by Josiah Whitman, M. D.

Chemistry and Pharmacy, by the Rev. Elijah Slack, A. M.

Theory and Practice of Medicine, by John Moorhead, M. D.

Professor Cobb will lecture daily;—price of his tickets, twelve dollars. Each of the other Professors will lecture at least Five times a week: price of each of their tickets, ten Dollars.

The fee for Matriculation, including the use of the Library and admittance to the Hospital, is three dollars; making the aggregate cost of Instruction, Forty-five dollars.

In the Hospital, (*the Commercial Hospital and Lunatic Asylum of Ohio,*) a regular course of Clinical Instructions is delivered, on the most important of the cases presented.

The cost of Graduation and the Diploma, is Fifteen Dollars.

The large and commodious College Edifice, now erecting, will be in readiness, and a Library provided, against the opening of the Session.

Each of the *Medical Districts of Ohio*, is entitled to select, and send for gratuitous admission to all the Lectures, one *indigent* pupil.

By order of the Faculty,
JOHN MOORHEAD, *Dean.*

Cincinnati, Aug. 28, 1826.
Medical College of Ohio,

TRANSYLVANIA UNIVERSITY.

Medical Department.

THE LECTURES will commence, as usual, on the first Monday of November, and terminate in the first week of the ensuing March.

Anatomy and Surgery, by Dr. Dudley.

Institutes of Medicine and Clinical Practice, by Dr. Caldwell.

Theory and Practice of Medicine, by Dr. Drake.

Obstetricks and the Diseases of Women and Children, by Dr. Richardson

Materia Medica and Medical Botany, by Dr Short.

Chemistry, by Dr. Blythe.

The paper of the Bank of the Commonwealth of Kentucky, heretofore received at par, by the Professors, having nearly gone out of circulation; specie, or its equivalent will hereafter be expected.—The price of each ticket is fifteen dollars, with the exception of that to the course of Anatomy and Surgery, which is twenty. The Matriculation, with admission to the Library and Reading Room, which are kept open every day, is five dollars,—making the aggregate fees for instruction $100.

The Library, containing about 3000 volumes, is constantly augmenting, by the importation of new standard and periodical works, from Great Britain and the continent of Europe.

The difficulties experienced by the two last Classes, from the disproportionate size of the *Anatomical Hall*, have been obviated by the erection of a new one, of enlarged dimensions, with appurtenances and conveniences not surpassed by any other in the United States.

By order of the Faculty,
DAN. DRAKE, M. D.
Dean of the Medical Faculty.

Transylvania University,
July 15, 1826.

THE Family Physician is for sale, at the Bookstore of Wm. Hill Woodward, No. 137, Main street, Cincinnati.

THE OHIO MEDICAL REPOSITORY Is conducted by GUY W. WRIGHT, M. D. and published semi-monthly, at *Two Dollars* per annum, in advance.